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The first record of *Ocys tachysoides* (Coleoptera: Carabidae) from the Slovak Republic

První nález střevlíka *Ocys tachysoides* (Coleoptera: Carabidae) ze Slovenska

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Abstract. This is the first record of *Ocys tachysoides* (Antoine, 1933) from the Slovak Republic. The newly reported localities represent the easternmost part of its geographical distribution in Europe.

INTRODUCTION

Carabid beetles of the subtribe Bembidiina Stephens, 1827 traditionally identified as *Ocys harpaloides* (Audinet-Serville, 1821) form a species-complex with a Mediterranean-Atlantic distribution. Using nuclear ribosomal and protein-coding sequence data, Maddison & Anderson (2016) discovered that the specimens formerly referred to *O. harpaloides* actually belong to two species, i.e. *O. harpaloides* and *O. tachysoides* (Antoine, 1933). Although morphologically very similar, these species can be distinguished by features of the male and female genitalia, elytral microsculpture and other diagnostic characters pointed out in the key provided by Maddison & Anderson (2016). These authors suggested that the examination of specimens originally identified as *O. harpaloides* in additional collections will likely show that *O. tachysoides* is more widely distributed. To date, *O. tachysoides* is known from North Africa (Morocco) and Europe (Belgium, France, Germany, the Netherlands, Portugal, Spain, Switzerland and United Kingdom) (Antoine 1955, Sciaky 1998, Toribio 2013, Maddison & Anderson 2016, Marggi et al. 2017, Muilwijk & Felix 2017).

Based on recent discoveries, we decided to restudy the carabid beetles identified as *O. harpaloides* in the private collections of K. Rébl, Vladimír Skoupý and Rudolf Kmeco.

MATERIAL AND METHODS

This paper is based on the study of five male specimens identified as *O. harpaloides* (Audinet-Serville, 1821) in the following collections: KRC – coll. Karel Rébl, Nové Strašecí, Czech Republic; VSC – coll. Vladimír Skoupý, Žilina, Czech Republic; RKC – coll. Rudolf Kmeco, Litovel, Czech Republic. Dissections were made using standard techniques. Aedeagus was bleached with a solution of 10% NaOH and preserved in DMHF (5,5-Dimethyl Hydantoin Formaldehyde) on paper mounts fixed on the same pins as the specimens.

RESULTS

The examination of five specimens of *O. harpaloides* from the collection of the first author revealed that the beetles collected in Slovakia actually should be referred to *O. tachysoides*. Following these results, we revised additional specimens of genus *Ocys* from Slovakia deposited in three private collections and the examined material confirmed the original finding. The results of our review are presented below.

Ocys tachysoides (Antoine, 1933)

Material examined. Slovakia occ., Bratislava (7868), 29.viii.1989, 2 ♂♂, beneath the loose bark of fallen branches of *Salix* sp. and *Populus* sp. on the bank of the river Danube, K. Rébl lgt. et coll. The specimens were originally identified by Karel Rébl as *O. harpaloides*, and the identification was confirmed by K. Hůrka (Benedikt & Těťál 1990). K. Rébl recently dissected the aedeagus and identified them as *O. tachysoides*; later, L. Toledano confirmed the identification.
Slovakia occ., Bratislava (7868), Malý ostrov, 3.iv.1990, 1 ♂, P. Bulirsch lgt., coll. V. Skoupý (Žilina); V. Skoupý det. as *O. harpaloides*, K. Rébl later corrected the identification to *O. tachysoides*.
Slovakia occ., Bratislava (7868), Malý ostrov, 3.iv.1990, 1 ♂, P. Bezděčka lgt., coll. R. Kmeco (Litovel); R. Kmeco det. as *O. harpaloides*, K. Rébl later corrected the identification to *O. tachysoides*.
Slovakia occ., Bratislava (7868), Děvínská Nová Ves – Děvín, 15.iii.2015, 1 ♂, on the bank of the river Danube, R. Kmeco lgt. et coll.; R. Kmeco det. as *O. harpaloides*, K. Rébl later corrected the identification to *O. tachysoides*.

CONCLUSIONS

The examination of *O. harpaloides* from three private collections confirmed the hypothesis of Maddison & Anderson (2016) that the cryptic species *O. tachysoides*, belonging to the *O. harpaloides* species complex, may be much more widespread than previously thought. Based on our review, these are the first reported records of *O. tachysoides* from Slovakia. The newly reported occurrences represent the easternmost extent of its known distribution in Europe. All other published and unpublished findings of *O. harpaloides* from Slovakia are assumed to belong to *O. tachysoides*. The species *O. harpaloides* should be deleted from the fauna of Slovakia.

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SOUHRN

Na základě informací uvedených v práci Maddison & Anderson (2016) byla provedena revize sbírkového materiálu ve sbírkách Karla Rébla, Vladimíra Skoupého a Rudolfa Kmeca, určeného jako *O. harpaloides* (Audinet-Serville, 1821). Výsledkem revize bylo zjištění, že *O. harpaloides* sbíraný v Bratislavě a uvedený jako nový pro Československo (Benedikt & Těťál 1990) je ve skutečnosti *O. tachysoides* (Antoine, 1933), který je tak uveden poprvé ze Slovenska. Bratislavské nálezy představují nejvýchodnější část geografického rozšíření druhu *O. tachysoides* v Evropě. Druh *O. harpaloides* je třeba vypustit z fauny Slovenska.